California Sportfishing Protection Alliance
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5 July 2009

Ms. Diane Messina, Supervising WRCE
Ms. Mary E. Serra, Senior, WRCE
Mr. Timothy O'Brien, EG
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6144

VIA: Electronic Submission
Hardcopy if Requested

RE: Tentative Waste Discharge Requirements for Sutter Home Winery, Sutter Home Winery Westside Facility, San Joaquin County

Dear Mesdames Messina, Serra and Mr. O'Brien;

The California Sportfishing Protection Alliance (CSPA) has reviewed the Tentative Waste Discharge Requirements (Permit) for Sutter Home Winery, Sutter Home Winery Westside Facility (Discharger) and submits the following comments.

CSPA requests status as a designated party for this proceeding. CSPA is a 501(c)(3) public benefit conservation and research organization established in 1983 for the purpose of conserving, restoring, and enhancing the state's water quality and fishery resources and their aquatic ecosystems and associated riparian habitats. CSPA has actively promoted the protection of water quality and fisheries throughout California before state and federal agencies, the State Legislature and Congress and regularly participates in administrative and judicial proceedings on behalf of its members to protect, enhance, and restore California's degraded water quality and fisheries. CSPA members reside, boat, fish and recreate in and along waterways throughout the Central Valley, including San Joaquin County.

1. The proposed Order must be revised to include an NPDES permit in accordance with California Water Code Section 13376.

CWC § 13376, Reports of discharges; Any person discharging pollutants or proposing to discharge pollutants to the navigable waters of the United States within the jurisdiction of this state or any person discharging dredged or fill material or proposing to discharge dredged or fill material into the navigable waters of the United States within the jurisdiction of this state shall file a report of the discharge in compliance with the procedures set forth in Section 13260, except that no report need be filed under this section for discharges that are not subject to the permit application requirements of the Federal Water Pollution Control Act, as amended.

Finding No. 23 states in part, "The wastewater storage and treatment ponds are not large enough

to allow storage of wastewater through the winter and application only during the growing season. As a result, the Discharger will have to apply wastewater throughout the year." According to Finding No. 25, waste application methods will include flood irrigation, sprinkler and drip irrigation. All of the listed application methods will result in waste being deposited on surface soils. Finding No. 43 indicates, "Approximately the western third of the facility is located within the 100-year floodplain." As shown on Attachment B a large portion of the land application area (LAA) is within the 100-year flood plain. In fact, portions of the LAA have been flooded in recent times and therefore, waste will be discharged to surface waters during periods of flooding. The Order must be revised to be an NPDES permit or the land application areas protected from flooding.

2. The proposed Order fails to require the Discharger to comply with California Code of Regulation (CCR) Title 27 requirements and must be revised to comply with Title 27.

CCR Title 27 §20090. SWRCB - Exemptions. (C15: §2511) states that: The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed: (a) **Sewage—**Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to Chapter 9, Division 3, Title 23 of this code, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable SWRCB-promulgated provisions of this division. (b) **Wastewater—**Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met: (1) the applicable RWQCB has issued WDRs, reclamation requirements, or waived such issuance; (2) the discharge is in compliance with the applicable water quality control plan; and (3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.

Region 5's Basin Plan, *Water Quality Objectives for Ground Waters* requires that: The following objectives apply to all ground waters of the Sacramento and San Joaquin River Basins, as the objectives are relevant to the protection of designated beneficial uses. These objectives do not require improvement over naturally occurring background concentrations. The groundwater objectives contained in this plan are not required by the federal Clean Water Act.

> **Bacteria:** In ground waters used for domestic or municipal supply (MUN) the most probable number of coliform organisms over any seven-day period shall be less than 2.2/100 ml.
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> **Chemical Constituents:** Ground waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. At a minimum, ground waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) specified in the following provisions of Title 22 of the California Code of

> Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, and Tables 64449-A (Secondary Maximum Contaminant Levels- Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. This incorporation-by-reference is prospective, including future changes to the incorporated provisions as the changes take effect. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. To protect all beneficial uses, the Regional Water Board may apply limits more stringent than MCLs.
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> **Tastes and Odors:** Ground waters shall not contain taste- or odor producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
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> **Toxicity:** Ground waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial use(s). This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

The proposed Order does not provided sufficient data to demonstrate that the discharge actually meets the preconditions such as comply with the Basin Plan and is exempt from Title 27 requirements. To the contrary, Finding Nos. 39, 40, and 41 indicates that the Discharger's waste and disposal practices have released constituents that degraded and polluted the underlying groundwater. Water Code Section 13173 defines “designated waste” to include “non hazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations that exceed applicable water quality objectives or that could reasonably be expected to affect beneficial uses of waters of the as contained in the appropriate state water quality control plan.”

While the Discharger contends that future modification to the facility will reduce waste concentrations, the Discharger has yet to provide any actual data to support these claims. As shown in Finding No. (s) 39 and 40, the facility has degraded groundwater near the ponds and LAA. Based on waste concentration reported in Finding No. 18, the 2008 average wastewater had TDS concentration of 3094 mg/L, BOD 904 mg/L, Nitrogen 38 mg/L and Nitrate 8.8 mg/L. Finding No. 16 indicates the expansion will increase wastewater flows from about 2.7 million gallons per year to around 28 million gallons per year. The Report of Waste Discharge water balance shows that the wastewater will be applied to total of 107.5 acres of LAA (15.5 acres of existing LAA and an additional 92 acres of new LAA). Therefore, loading calculations show that the waste loads to the LAA will increase as a result of expansion project.

In accordance with Title 27, a Discharger that treat or dispose of waste to a land treatment unit are required to demonstrate, prior to the application of waste, that the waste can be completely degraded, transformed or immobilization will take place in the treatment zone. To demonstrate this, prior to the application of waste, the Discharger is required to make waste application to a test plot for a sufficient period in order to provide data to the Regional Board that shows waste

can be completely degraded, transformed or immobilization. Given the extremely shallow groundwater (0.41 ft bgs see Finding No. 35) it is necessary that any claim of waste treatment in the LAA be supported by actual data. The RWD is incomplete as it failed to make such a demonstration and not conduct the necessary tests.

Finding No. 25 indicates that the TDS loading in 2007 12,512 lbs/ac/yr which is largely composed on low nutrient salts. Finding 18 indicates, "In 2008, the Discharger discovered errors in the analytical data that overstate the concentration of TDS in the samples. Because operation of the expanded facility will emphasize source control, the Discharger believes the historic data do not represent future wastewater quality." If true then no valid data exist for TDS. The Discharger has had over seven years to collect accurate TDS data but failed to do so.
Finding No. 41 states, "Review of the groundwater data presented in Findings 34, 39, and 40 indicates highly variable groundwater quality across the site. All of the reasons for the variability are not known; but the low groundwater gradient, past land use, **localized discharge of both high and low quality wastewater/stormwater**, and nearby irrigation canals are probable influences."

Precondition to exempt a discharge from Title 27 requirements include that the discharge comply with the Basin Plan. However, the record indicates that the Discharge has degraded groundwater quality in the vicinity of the ponds and as such does not comply with the Basin Plan. In the case of the LAA, the Region Board lacks the necessary data to make such a determination. The proposed Order and record indicate that the Discharger's discharge has degraded groundwater and that based on reported concentrations of waste is properly classified as a "designated waste." The Discharger has not provided the necessary data to justify the precondition for the exemption. Therefore, the Discharger must comply with the prescriptive standards specified in Title 27, including but not limited to submitting a complete RWD for Title 27 and financial assurance documentation.

3. The proposed Order must be revised to address seasonal variability of nutrient uptake by crops.

The uptake of nitrogen by plants such as corn and grapes is variable. Corn takes up nitrogen in an S shaped curve, with very low uptake during the first 30 days of growth, then taking up nitrogen very rapidly until silking. Uptake after silking is less rapid. The literature indicates (Iowa State1962) that 75-80% of nitrogen in corn is taken up by silking. Winter forage is generally reduced due to climate conditions and cool weather. Where little growth is made before cold weather sets in, relatively little nitrogen uptake will occur. The application of waste is the highest early spring and winter when nitrogen uptake is low. In addition, vineyards are dormant in the late fall and early winter season. Given that groundwater is shallow (less than 0.5 feet in some locations of the LAA) pollutants applied at these times will not be retained within the LAA but will pass to underlying groundwater and contribute to further degradation or pollution. The groundwater underlying the site is already polluted and the facility's discharge at least seasonally will contribute further exacerbate the problem.

4 Finding No. 27 is incorrect and must be revised.

Finding No. 27 states in part, "Crops will be cut and removed from the LAAs. Removal of the crop will remove the nitrogen and dissolved solids that are taken up by the crop." This Finding is simply incorrect. Finding 24 indicates that over 55 percent of the completed LLA with be dedicated to vineyards. Typically vineyards other than some minor annual pruning will not have the vines removed annually and therefore will not be cropped as indicated in Finding No. 27. Finding No. 27 is incorrect and must be revised.

Thank you for considering these comments. If you have questions or require clarification, please don't hesitate to contact us.

Sincerely,

Bill Jennings, Executive Director
California Sportfishing Protection Alliance